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# 1<sup>st</sup> Annual Cerebrospinal Fluid Disorders Symposium

Hydrocephalus and More— Cerebrospinal Fluid Matters!

Saturday, June 25, 2016

Warren Alpert Medical School | Providence, RI

# **Jointly Provided By**

Warren Alpert Medical School, Brown University and Department of Neurosurgery at Rhode Island Hospital

# In Collaboration With

Chiari & Syringomyelia Foundation







# 1<sup>st</sup> Annual CSF Disorders Symposium Hydrocephalus and More—Cerebrospinal Fluid Matters!

# **Program Description**

Today, providers often face challenges on how to best diagnose, treat and manage a variety of cerebrospinal fluid related disorders (CSF) including hydrocephalus, chiari malformation, Syringohydromyelia, tethered cord and spina bifida. After diagnosis has been determined, many physicians face challenges in determining the best surgical or non-interventional plan for their patient with the most favorable outcome. Therefore, it's essential to keep community of physicians and health care providers abreast of the new technologies and/or methods used to treat many varieties of pediatric and adult disorders of the Cerebrospinal fluid system.

In our First Annual CSF Disorders Symposium, we will examine new diagnostic and treatment protocols for patients with a variety of CSF disorders. We will begin by exploring best practices in identifying the most common diagnostic tools and imaging as well as treatment and management options for hydrocephalus, chiari malformation, Syringohydromyelia, tethered cord and spina bifida. We will review congenital disorders of the spine associated with CSF disorders. This event will also recognize and integrate basic science research and its translation into diagnosis and management of Cerebrospinal fluid disorders.

# **Target Audience**

Physicians, physician assistants, nurse practitioners, residents, and fellows specializing in primary care, neurosurgery, neurology, orthopedic surgery, neuropsychology, medicine, geriatrics, and pediatrics.

# **Learning Objectives**

At the conclusion of this activity, participants should be able to:

- Describe the current treatment options for patients with Hydrocephalus
- Identify common diagnostic and imaging tools for Cerebrospinal Fluid Disorders
- Describe the current treatment options for patients with Chiari and Syringohydromyelia
- · Recognize key contributions from basic science research in diagnosis and management of Cerebrospinal fluid disorders
- Outline evidence-based treatment of cerebrospinal fluid disorders

# Saturday, June 25, 2016

7:00-8:00 ам	Registration, Breakfast, Visit Exhibitors	11:45–12:45 рм	Lunch
8:00-8:30	Welcome Ziya L. Gokaslan, MD, FAANS, FACS and Dorothy Poppe	12:45-1:30	<b>Aging and Cerebrospinal Fluid Disorder</b> Stephen P. Salloway, MD, MS
	Introduction Petra M. Klinge, MD, PhD	1:30-2:00	The Cranio-Spinal CSF Pulsation: Origin and Clinical Relevance Noam Alperin, PhD
8:30-9:15	Management of Hydrocephalus: Ongoing Challenges Peter M. Black, MD, PhD	2:00-2:30	Cleft and Craniofacial Surgery: Holistic Care With a Multidisciplinary Team Approach Albert S. Woo, MD
9:15-10:00	Diagnosis and Management of the Slit Ventricle Syndrome	2:30-2:45	Break and Visit Exhibitors
	Harold L. Rekate, MD	2:45-4:00	Translation of Basic Sciences Into Understanding of Cerebrospinal
10:00-10:15	Break and Visit Exhibitors		Fluid Disorders
10:15–10:45	Current Concepts in the Management and Treatment of Tethered Cord & Syringomyelia Petra M. Klinge, MD, PhD		Computational and Experimental Exploration of CSF Dynamics Andreas A. Linninger, PhD
10:45-11:15	Fetal Management of Spina Bifida and Chiari Malformation Francois I. Luks, MD, PhD		Brain Oscillations and the Assessment of Cognitive Function Rebecca D. Burwell, PhD
11:15–11:45	Management of Spinal Deformity Associated With CSF Disorders Craig P. Eberson, MD		Next Generation Optical Methods for Controlling and Watching the Choroid Plexus Christopher I. Moore, PhD
		4:00-4:15 pm	Closing Remarks

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#### **Course Director**

#### Petra M. Klinge, MD, PhD

Professor of Neurosurgery
Warren Alpert Medical School of Brown University
Director, Center for CSF Disorders of the Brain and Spine
Rhode Island Hospital
Providence, RI

# **Faculty**

#### Noam Alperin, PhD

Professor of Radiology and Biomedical Engineering Physiologic Imaging and Modeling University of Miami Miller School of Medicine Evelyn F. McKnight Brain Institute University of Miami Health System | Miami, FL

#### Peter M. Black, MD, PhD

Franc D. Ingraham Professor of Neurosurgery, Emeritus Harvard Medical School Founding Chair, Department of Neurosurgery Brigham and Women's Hospital Chair Emeritus, Department of Neurosurgery Boston Children's Hospital | Boston, MA

#### Rebecca D. Burwell, PhD

Professor of Psychology and Neuroscience Department of Cognitive, Linguisitic and Psychological Sciences Brown University | Providence, RI

#### Craig P. Eberson, MD

Associate Professor of Orthopaedics Program Director, Orthopedic Surgery Residency Warren Alpert Medical School of Brown University Chief, Division of Pediatric Orthopedics Hasbro Children's Hospital | Providence, RI

### Ziya L. Gokaslan, MD, FAANS, FACS

Gus Stoll, MD Professor and Chair, Department of Neurosurgery Warren Alpert Medical School of Brown University Neurosurgeon-in-Chief Rhode Island Hospital and The Miriam Hospital Clinical Director, Norman Prince Neurosciences Institute President, Brown Neurosurgery Foundation | Providence, RI

#### Andreas A. Linninger, PhD

Professor of Bioengineering, Chemical Engineering and Computer Science Research Faculty Department of Neurosurgery Director, Laboratory for Product and Process Design Department of Bioengineering University of Illinois at Chicago | Chicago, IL

#### Francois I. Luks, MD, PhD

Professor of Surgery, Pediatrics, and Obstetrics and Gynecology Director, Program in Fetal Medicine Warren Alpert Medical School of Brown University Co-Director, Fetal Treatment Program of New England Rhode Island Hospital, Hasbro Children's Hospital, and Women & Infants Hospital | Providence, RI

#### Christopher I. Moore, PhD

Associate Professor of Neuroscience Investigator, Brown Institute for Brain Sciences Brown University | Providence, RI

#### **Dorothy Poppe**

Executive Director Chiari & Syringomyelia Foundation | Staten Island, NY

#### Harold L. Rekate, MD

Professor of Neurosurgery Hofstra Northwell School of Medicine | Hempstead, NY

### Stephen P. Salloway, MD, MS

Professor of Neurology Warren Alpert Medical School of Brown University Director of the Memory & Aging Program Butler Hospital | Providence, RI

#### Albert S. Woo, MD

Director, Craniofacial Program
Director, Pediatric Plastic Surgery
Rhode Island Hospital and The Miriam Hospital | Providence, RI

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# **Registration Information**

Register online at: https://apps.biomed.brown.edu/cme\_registration

### **Registration Fee:**

Through May 31 \$75.00 After May 31 \$100.00

Conference registration fee includes: breakfast, breaks, lunch, access to an online syllabus, and on-site parking.

## **Cancellation Policy**

Cancellations/substitutions must be made in writing to the Brown CME Office at least two weeks prior to the conference, no later than June 10, 2016. A \$25.00 administrative fee will be charged for all refunds (no refunds for "no shows"). There will be no additional charge for substitutions. This conference is subject to change or cancellation.

# Conference Location and Parking

Warren Alpert Medical School of Brown University 222 Richmond Street, Providence, RI 02912

Parking will be available in the parking garage adjacent to the Medical Building. Enter through the Eddy Street Entrance (333 Eddy Street on Google Maps) and take a ticket from the machine—please bring this ticket with you and see the registration desk. You may park on any level of the garage and can exit using either the Eddy Street or Elm Street exits.

## **Hotel Accommodations**

The Providence Marriott 1 Orms Street, Providence, RI 02903 401-272-2400

To book hotel reservations with the current Brown University rate: http://www.campustravel.com/university/brown/

#### Accreditation

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Warren Alpert Medical School of Brown University and Department of Neurosurgery at Rhode Island Hospital. The Warren Alpert Medical School of Brown University is accredited by the ACCME to provide continuing medical education for physicians.

### **Credit Designation**

<u>Physicians</u>: The Warren Alpert Medical School of Brown University designates this live activity for a maximum of 6.5 *AMA PRA Category 1 Credits*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

<u>Physician Assistants/Nurse Practitioners</u>: Participants will receive a Certificate of Attendance stating this program is designated for 6.5 hours *AMA PRA Category 1 Credits*<sup>TM</sup>. This credit is accepted by the AAPA and AANP

#### For More Information

Contact the Brown CME Office 233 Richmond Street, Box G-R156 Providence, RI 02912 Ph: 401.863.2871 | F: 401.863.2202 Email: CME@Brown.edu

Please notify the Brown CME Office in writing at least two weeks prior to the conference to request reasonable accommodations.

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